

**Notice of Allowability**

Application No.

09/921,077

Examiner

Quynh H Nguyen

Applicant(s)

MALHI ET AL.

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/2/01.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ The drawings filed on 02 August 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 8/2/01
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

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***Allowable Subject Matter***

1. Claims 1-20 are allowed.
2. The following is a statement of reasons for the indication of allowable subject matter:

Roberts et al. (U.S. Patent 6,219,531) teach an architecture and frequency plan for a UHF radio transceivers including: common first and second local oscillators shared between transmitter and receiver, the second local oscillator outputting its signal to both the receiver second mixer and the transmitter first mixer. The first receive local oscillator is able to supply frequencies to the first mixer to produce a first intermediate frequency (IF) from an incoming signal. Final channel filtering in the receiver is done at the second IF frequency. In one embodiment, a low value for the ratio of the maximum RF operating frequency value to the first IF used by the radio as part of its internal conversion process.

McNicol et al. (U.S. Patent 5,170,495) teach a method of controlling a power amplifier of an radio frequency (RF) communications system in which and intermediate frequency (IF) input signal is mixed with a local oscillator signal to produce an RF signal for transmission, comprising: deriving from the local oscillator signal and the RF signal and IF output signal representative of an output signal of the power amplifier; monitoring amplitude distortion of the RF signal by comparing the IF output signal with the IF input

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signal; and controlling signal gain between an input for the IF input signal and an output for the RF signal in dependence upon the monitored amplitude distortion thereby to control clipping in the power amplifier. The input signal is mixed with the local oscillator signal to produce the RF signal.

As to claim 1, the prior art of record fails to teach, or render obvious, alone or in combination, a wireless communications transceiver system comprising the claimed means and their components, relationships, and functionalities as specifically recited in claim 1.

Claims 2-10 are allowed because they depend on allowable claim 1.

As to claim 11, the prior art of record fails to teach, or render obvious, alone or in combination, a variable gain mixer comprising the claimed means and their components, relationships, and functionalities as specifically recited in claim 11.

Claim 12 is allowed because it depends on allowable claim 11.

As to claim 13, the prior art of record fails to teach, or render obvious, alone or in combination a variable gain mixer comprising the claimed means and their components, relationships, and functionalities as specifically recited in claim 13.

Claim 18 is allowed because it depends on allowable claim 13.

As to claims 14 and 16, the prior art of record fails to teach, or render obvious, alone or in combination, a variable gain mixer comprising the claimed means and their components, relationships, and functionalities as specifically recited in claims 14 and 16.

Claims 15 and 19 are allowed because they depend on allowable claim 14, and claims 17 and 20 are allowed because they depend on allowable claim 16.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quynh H. Nguyen whose telephone number is 703-305-5451. The examiner can normally be reached on Monday - Thursday from 6:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar, can be reached on (703) 305-4731. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

qhn

Quynh H. Nguyen  
January 24, 2005

  
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